

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



08 JUL 2005

(43) International Publication Date
5 August 2004 (05.08.2004)

PCT

(10) International Publication Number
WO 2004/065558 A3

(51) International Patent Classification⁷: C12N 15/85.
A01K 67/00

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(21) International Application Number:
PCT/US2004/001568

(22) International Filing Date: 16 January 2004 (16.01.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/440,424 16 January 2003 (16.01.2003) US

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US): NORTH
CAROLINA STATE UNIVERSITY [US/US]; 2401 Re-
search Drive, Suite 1122, Campus Box 8210, Raleigh, NC
27695-8210 (US).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(72) Inventors; and
(75) Inventors/Applicants (for US only): PETITTE, James,
N. [US/US]; 620 Shadywood Lane, Raleigh, NC 27603
(US). PARDUE, Samuel, Lloyd [US/US]; 6020 Fordland
Drive, Raleigh, NC 27606 (US).

(88) Date of publication of the international search report:
27 October 2005

(74) Agent: TAYLOR, Arles, A., Jr.; Jenkins, Wilson & Tay-
lor, P.A., Suite 1400, University Tower, 3100 Tower Boule-
vard, Durham, NC 27707 (US).

(15) Information about Correction:

Previous Correction:
see PCT Gazette No. 46/2004 of 11 November 2004, Sec-
tion II

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

WO 2004/065558 A3

(54) Title: DEPLETION OF ENDOGENOUS PRIMORDIAL GERM CELLS IN AVIAN SPECIES

(57) Abstract: Methods for modulating primordial germ cell (PGC) numbers and/or development in avians are provided. In one embodiment, the presently disclosed subject matter provides a method for modulating primordial germ cells numbers in an avian embryo comprising immunizing a female bird with an antigen associated with primordial germ cells, whereby an egg produced by the female bird comprises a sufficiently high concentration of antibodies specific for the antigen to modulate numbers of endogenous PGCS in an avian embryo present within in the egg. Also provided are methods for producing chimeric avians, methods for increasing the proportion of male birds in a plurality of eggs, methods of producing avian gametes, and methods for enhancing germ line transmission of nucleic acids in birds.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/01568

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12N 15/85; A01K 67/00
US CL : 435/325; 800/19

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 435/325; 800/19

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	VICK et al. Germ-line chimaeras can produce both strains of fowl with high efficiency after partial sterilization. J. Reprod. Fert. July 1993. Vol. 98. No. 2. pg 637-641. See entire	1-57
A	BRESLER. Manipulations of germ-cell populations in the gonad of the fowl. Poultry Sci. May 1994. Vol. 35. No. 2, pg 241-247. See entire article.	1-57
A	US 6,354,242 A (PARDUE) 12 March 2002, col. 6, lines 40-55.	1-57

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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

22 November 2004 (22.11.2004)

Date of mailing of the international search report

11 SEP 2009

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Faxsimile No. (703) 305-3230

Authorized officer

Michael Wilson

Telephone No. (571) 272-1600

Form PCT/ISA/210 (second sheet) (January 2004)

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